

REMARKS

Applicant thanks the Examiner for the very thorough consideration given the present application.

Claims 1-10 and 23-27 are now present in this application. Claims 1, 7 and 23 are independent.

Claims 1, 7 and 23 have been amended. Reconsideration of this application, as amended, is respectfully requested.

Rejections Under 35 U.S.C. §§ 102/103

Claims 7-10 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,295,109B1 to Kubo et al. (Kubo), and claims 1-6 stand rejected under 35 U.S.C. 103(a) over Kubo, in view of U.S. Patent No. 4,017,156 to Moriyama. These rejections are respectfully traversed.

Kubo (Fig. 8B) discloses a transmissive electrode 31. Figure 8B is a cross-sectional view of the active matrix substrate taken along line 8D-8D' of Figure 8A (cited by the Examiner). An uncovered portion of transmissive electrode 31 is centrally disposed in, and bordered by inner peripheral edges of reflective pixel electrode 30 (see Figs. 8A and 8B). The Examiner describes the uncovered portion of transmissive electrode 31 as a light-transmitting region.

A contrasting feature between the Applicant's claimed invention and the conventional type liquid crystal device shown in Fig.5 of the Applicant's disclosure is that the reflective film 36 overlaps with every inner edge of the gate line 25 and the data line 24 (see Applicants's specification, page 9, lines 20-24). Similarly, Fig.8 of Kubo shows that film 36 overlaps with every inner edge of the gate line 21 and the data line 22. In other words, Kubo discloses the same problematic features of the device disclosed in the Applicants' conventional art.

It is clear to see that the Applicants' claimed invention is distinguishable over the disclosed conventional art. On similar (if not identical) bases, the Applicants' claimed invention is distinguishable over the prior art of record, including Kubo. Particularly, in the Applicants' claimed invention, one edge of either the data line or the gate line is overlapped by the reflective film, while an opposing edge is not. A light reflecting region is disposed between the reflecting film and the data line or gate line at the edge where there is no overlap.

Therefore, it is readily seen that Kubo fails to teach or suggest said light transmitting region is disposed between an inner edge of a gate line and an outer side periphery of said reflecting film, as recited in independent claim 7, as amended, and similarly stated in independent claims 1 and 23, as amended. Moriyama cannot fill the deficiency of Kubo.

Claims 8-10 depend, either directly, or indirectly on independent claim 7, and therefore are patentable for at least the reasons stated with respect to independent claim 7. Claims 2-6 and 24-27 depend, either directly or indirectly on independent claims 1 and 23. Since neither Kubo, nor Moriyama discloses or suggests the above-recited features of independent claims 1 and 23, Kubo, in view of Moriyama cannot render claims 1-6 and 23-27 obvious to one of ordinary skill in the art.

Reconsideration and withdrawal of these art grounds of rejection are respectfully requested.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. s therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone

Application No.: 09/559,403
Art Unit 2871

Attorney Docket No. 0465-0711P
Amendment filed on July 14, 2003
Page 8

Percy L. Square, Registration No. 51,084, at (703) 205-8034, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

Attached hereto is a marked-up version of the changes made to the application by this Amendment.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

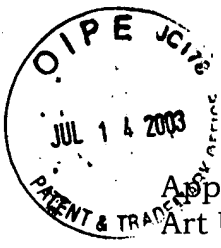
By: 

Joseph A. Kolasch
Reg. No.: 22,463

JAK/*PLS*:asc

P.O. Box 747
Falls Church, Virginia 22040-0747
Telephone: (703)205-8000

Attachment: Version with Markings to Show Changes Made



Application No.: 09/559,403
Art Unit 2871

Attorney Docket No. 0465-0711P
Amendment filed on July 14, 2003
Page 9

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Please amend the claims as follows:

1. (Three Times Amended) A transmission-reflection type liquid crystal display device, comprising:

a first transparent substrate;

a second transparent substrate;

a liquid crystal layer between the first transparent substrate and the second transparent substrate;

a linear polarizer on the second transparent substrate;

a cholesteric liquid crystal polarizer on an outer side of the first transparent substrate; and

a reflecting film on an inner side of the first transparent substrate adjacent to the liquid crystal layer, the reflecting film defining a light-transmitting region, wherein said light transmitting region is disposed between an inner edge of a gate line and a side of an outer edge periphery of said reflecting film [bordered by a gate line and the reflecting film] in each pixel.

7. (Twice Amended) A transmission-reflection type liquid crystal display device, comprising:

a plurality of gate lines and data lines defining a plurality of pixels;

a transistor in each pixel, a gate of which is connected to [a] gate line and a second terminal of which is connected to a data line;

a reflecting film formed in each pixel and connected to a third terminal of the transistor in each pixel, an outer edge at a side of said reflecting film overlapping an inner edge of one of said gate lines, while an outer edge at an

opposing side of said reflecting film does not overlap an inner edge of an adjacent gate line, and

wherein a light-transmitting region through which light may pass is disposed between said one of said [by a] gate lines and said outer edge of said reflecting film which does not overlap an inner edge of said adjacent gate line in each pixel.

23. (Amended) A transmission-reflection type liquid crystal display device, comprising:

a first substrate;

a second substrate having a predetermined space with the first substrate;

a backlight on a lower side of the first substrate;

a linear polarizer on the second substrate;

a common electrode on an inner side of the second substrate;

a plurality of gate and data lines on an inner side of the first substrate;

a plurality of pixel regions being defined by the plurality of gate and data lines;

a reflecting film on the pixel regions; and

a liquid crystal layer between the first and second substrates,

wherein an outer peripheral edge of a side of the reflecting film is apart from any one of the gate and data lines to define a light-transmitting region [there]between said any one of the gate and data lines and a reflecting region on the reflecting film, while an outer peripheral edge of an opposing side of said reflecting film overlaps an edge of said any one of the gate and data lines in one pixel.